

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 July 2004 (15.07.2004)

PCT

(10) International Publication Number  
WO 2004/059934 A1

(51) International Patent Classification<sup>7</sup>: H04L 27/233,  
H04Q 7/30

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(21) International Application Number:  
PCT/IB2002/005613

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,  
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZM, ZW.

(22) International Filing Date:  
24 December 2002 (24.12.2002)

(25) Filing Language: Italian

(26) Publication Language: English

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(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK,  
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

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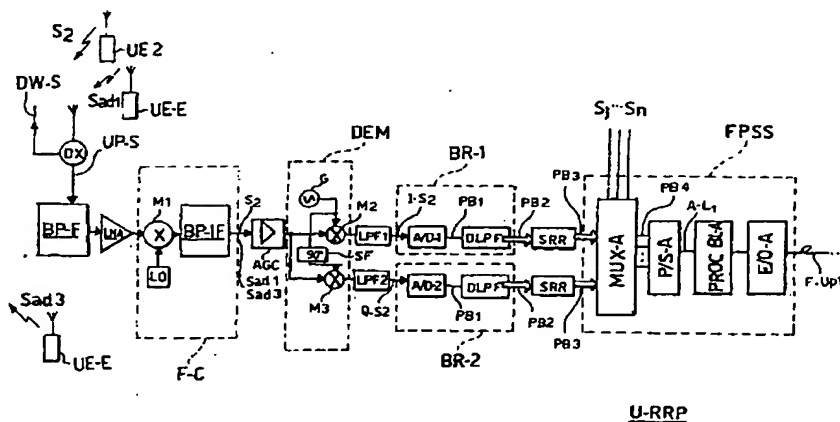
Published:

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— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: RADIO BASE STATION RECEIVER HAVING DIGITAL FILTERING AND REDUCED SAMPLING FREQUENCY



(57) Abstract: Station (U-RRP) for processing a first signal which can be generated by a mobile terminal and belongs to a plurality of signals for mobile radio communications networks, said station including: an input able to receive from an antenna (A) the first signal associated with a first band and at least one adjacent signal of said plurality associated with a second band adjacent to that of the first signal; a processing stage (BP-IP, DEM, AD-1) for generating from the first digital signal at a first sampling frequency, this first digital signal including a useful spectral content of the first signal and an interfering spectral content associated with said adjacent signal; a digital filter (DLPF) for processing the first digital signal, attenuating the interfering spectral content, and for providing a filtered digital signal including at least part of said useful spectral content, sampled at a second sampling frequency less than the first sampling frequency and an electro-optical converter (E/O-A) for generating from said filtered digital signal electromagnetic radiation to be transmitted on a waveguide (F-up1).

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 02/05613

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04L27/233 H04Q7/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04Q H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

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X	US 5 504 455 A (INKOL ROBERT J) 2 April 1996 (1996-04-02)  column 5, line 22 - line 57; figure 4 ---	1-3,5,6, 11,13, 15-17
A	US 5 682 256 A (MOTLEY ANDREW JAMES ET AL) 28 October 1997 (1997-10-28) column 1, line 40 -column 2, line 8; figures 1,2A,2B --- -/--	1-24

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- \*&\* document member of the same patent family

Date of the actual completion of the international search

14 May 2003

Date of mailing of the international search report

23/05/2003

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Intern al Application No  
PCT/IB 02/05613

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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